



UNLEARNING: The Hidden Key to Helping Soldiers Learn

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Topics

- Who cares? Why is unlearning important?
- Our Mental Architecture – knowledge is designed to be difficult to change
- Six Stages of Change
- How Trainers Can Support Unlearning to Help Soldiers Learn and Transfer

Who Cares?

- All adult learning requires unlearning old habits of thinking and behavior
 - Example: Tiger Woods putting slump before 4th Masters victory
- Soldiers need to use new learning when under stress but tend to revert to old habits
- Training = Teaching to change
- Change = Unlearning to make way for new learning

Why is Unlearning Necessary?

- “Insanity is doing the same old thing over and over again and expecting a different result” (Albert Einstein)
- "If at first you don't succeed, try, try again. Then give up. There's no sense being a damn fool about it." (Mark Twain)

Why is Unlearning Difficult?

- 90 % of Knowledge is Automated & Unconscious
 - Includes acting and thinking (“Blink”)
 - Automates only when accurate in context
 - Context changes but knowledge does not
 - The more it is used, the stronger it becomes and the more difficult it is to change
 - Intention not enough (Green Snake Test)
 - We know very little about how to replace automated knowledge with new knowledge

Why is Unlearning Difficult?

- Very difficult to change even in small ways
 - QWERTY keyboard OR driving on left
 - Misconceptions about how things work
 - Thermostat and accelerator example
 - Limits on new thinking (3 ideas) -- overload causes thinking to crash
- When we unlearn, like Tiger Woods, we slump before recovering
- So, what works?

So how do we help people unlearn - so that they can learn?

- Start by thinking about how someone would do something without being trained
 - If they succeed, they don't need training
 - If not, what they tried to do is what needs to be unlearned
 - Intention is not enough - how many thought of green snake? Ironical processes dominate.
- Helping someone unlearn begins with understanding the stages of change
 - Each stage requires different kinds of support

6 Stages of Change: Prochaska

- 1. Pre-contemplation:** No need to change
- 2. Contemplation:** Maybe I need to change?
- 3. Preparation:** Ok, I'm going to change
- 4. Action:** I'm in the process of changing
- 5. Maintenance:** I'm holding on to change
- 6. Relapse:** I've fallen off the wagon

6 Stages of Change: Prochaska

1. Pre-contemplation: No need to change

- Individual or team denies need to learn anything new or to change
- Must experience conflict about beliefs
 - Test their way to accomplish goal and show that it does not work (handles overconfidence)
 - Show them similar change by respected others

6 Stages of Change: Prochaska

2. Contemplation: Maybe I need to change?

- Sitting on the fence – ambivalent
- Evaluate team and individual benefits of change plus risks of not changing
- Handle emotional issues with positivity
 - Active listening, enjoyable settings
- Handle under confidence
 - Focus on strategy that needs changing not the person who must change
 - Promise help and structure

6 Stages of Change:

Prochaska

3. Preparation: Ok, I'm going to change

- Testing the water – planning to act soon
- Solve obstacle problems
- Establish necessary prior knowledge
- Small steps and practice, practice, practice
- Give them day by day or hour by hour goals and expectations

6 Stages of Change:

Prochaska

4. Action: I'm in the process of changing

People are in training and/or practicing new learning to “overlearn”

- Teach concrete procedure that specifies exactly how to act and decide
- Practice, practice, practice
- Ask them to pause and choose new learning
- Provide job aid's, coaches and Q&A
- Insist on persistence –

6 Stages of Change: Prochaska

5. Maintenance: I'm holding on to change

Transferring new learning to field – trying to avoid defaulting to old patterns

- Prepare commanders to understand and demand new behavior
- Provide job aids and coaching
- Prepare them for relapse – explain it and how to overcome it
- Mindfulness meditation (see references)

6 Stages of Change: Prochaska

6. Relapse: I've fallen off the wagon

Old behaviors have dominated

- Treat as normal –Remember the green snake? Expect it. Have a plan.
- Evaluate and neutralize the trigger for relapse (stress, fear, emotionality)
- Reassess barriers and motivation (value, self confidence, mindfulness) and fix

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Summary

- We must Unlearn to Learn
- Automated thinking and acting difficult to learn and to change
- Stress and fear causes old knowledge to reassert itself
- Help people first by deciding which of the six stages best represents their position
- Treat them depending on their stage

References – Reading List

Gladwell, M. (2005) *Blink: The Power of Thinking Without Thinking*. NY: Little, Brown and Co.

Prochaska, J.O., Norcross, J.C., & DiClemente, C.C. (1994). *Changing for Good*. NY: William Morrow.

Segal, Z.V., Williams, J.M.G., & Teasdale, J.D. (2002) *Mindfulness-based Cognitive Therapy for Depression: a new approach to preventing relapse*. NY: Guilford Publications.

